

amendment can be found throughout the Specification, for example, at page 31, lines 7 through 24, and in Table 4. No new matter has been added.

Claim 9 has been amended to recite proper dependency.

Claim 10 has been amended to recite a method for predicting the likelihood that an individual will have Crohn's disease, comprising the steps of a) obtaining a DNA sample from an individual to be assessed; and b) determining the nucleotide present at nucleotide position 218 relative to the 5' most nucleic acid in SEQ ID NO: 1127, wherein the presence of a cytosine at nucleotide position 218 is indicative of a reduced likelihood of Crohn's disease in the individual as compared with an individual having a guanine at nucleotide position 218. Support for this amendment can be found throughout the Specification, for example, at page 31, lines 7 through 24, and in Table 4. No new matter has been added.

Claim 12 has been amended to recite proper dependency.

Objection to Claims 8-12

The Examiner has objected to Claims 8-12 as depending on cancelled claims. Claims 8 and 11 have been cancelled herein, and Claims 9 and 12 have been amended to recite proper dependency. Withdrawal of the objection is respectfully requested.

Objection to the Specification

The Examiner has objected to the disclosure because the Specification contains an embedded hyperlink and/or other form of browser-executable code.

The Specification has been amended to remove embedded hyperlinks or other forms of browser-executable code in the Specification. Reconsideration and withdrawal of the objection are respectfully requested.

Rejection of Claims 7, 9, 10 and 12 under 35 U.S.C. §112, First Paragraph

Claims 7, 9, 10 and 12 are rejected under 35 U.S.C. §112, first paragraph, because, according to the Examiner, the specification, while being enabling for a method of predicting the likelihood that an individual will have Crohn's disease by determining the nucleotide present at position 218 of SEQ ID NO: 1127, does not reasonably provide enablement for a method of

predicting the likelihood that an individual will have any inflammatory bowel disease by determining the nucleotide at the same position.

Claims 7 and 10 have been amended to recite methods for predicting the likelihood that an individual will have Crohn's disease by determining the nucleotide present at position 218 of SEQ ID NO: 1127. Claims 9 and 12 are dependent on Claims 7 and 10, respectively. As noted by the Examiner these claims are fully enabled by the Specification. Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,
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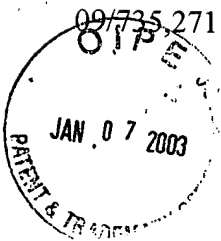
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Dated:

1/3/03



MARKED UP VERSION OF AMENDMENTS

Specification Amendments Under 37 C.F.R. § 1.121(b)(1)(iii)

Replace the paragraph at page 33, lines 21 through 29 with the below paragraph marked up by way of bracketing and underlining to show the changes relative to the previous version of the paragraph.

In the first phase of the microsatellite LD mapping, a total of 57 microsatellite markers were genotyped on 296 CD triads. Information regarding primer sequence, allele size range, and suggested amplification conditions for 55 of these genetic markers (all but IRF1p1 and CSF2p10) can be obtained from the Genethon ([<http://www.genethon.fr/>] on the World Wide Web at [genethon.fr](http://www.genethon.fr/)), Marshfield ([<http://research.marshfieldclinic.org/genetics/>] on the World Wide Web at research.marshfieldclinic.org/genetics/), or Genome Database ([<http://www.genethon.fr/>] on the World Wide Web at [genethon.fr](http://www.genethon.fr/))[World Wide Web sites]. The markers IRF1p1, CSF2p1, and the 8 markers used in the 2nd stage of LD mapping, were designed during the course of this study. Genotypes for all of these markers were obtained as described above.

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

7. (Amended) A method for predicting the likelihood that an individual will have [an inflammatory bowel] Crohn's disease, comprising the steps of:
- a) obtaining a DNA sample from an individual to be assessed; and
 - b) determining the nucleotide present at [one or more of] nucleotide position[s] [610, 514,] 218[, 425, 197, 112, 233, 608, 143, 317, and 316] relative to the 5' most nucleic acid in [SEQ ID NO: 1119, SEQ ID NO: 1124,] SEQ ID NO: 1127[, SEQ ID NO: 1133, SEQ ID NO: 1142, SEQ ID NO: 1160, SEQ ID NO: 1262, SEQ ID NO: 1294, SEQ ID NO: 1341, SEQ ID NO: 1832, and SEQ ID NO: 1847, respectively,]
- wherein the presence of [one or more of a guanine at nucleotide position 610, a cytosine at nucleotide position 514,] a guanine at nucleotide position 218[, a thymine at nucleotide position 425, an adenine at nucleotide position 197, an adenine at nucleotide position 112, a guanine at nucleotide position 233, a thymine at nucleotide position 608, a guanine at nucleotide position 143, a guanine at nucleotide position 317, and a cytosine at nucleotide

position 316] is indicative of a greater likelihood of [having an inflammatory bowel] Crohn's disease in the individual as compared with an individual having [one or more of a thymine at nucleotide position 610, a guanine at nucleotide position 514,] a cytosine at nucleotide position 218[, a cytosine at nucleotide position 425, a guanine at nucleotide position 197, a cytosine at nucleotide position 112, a cytosine at nucleotide position 233, a cytosine at nucleotide position 608, an adenine at nucleotide position 143, a thymine at nucleotide position 317, and a thymine at nucleotide position 316, respectively.]

9. (Amended) A method according to Claim [1] 7, wherein the individual is an individual at risk for development of Crohn's disease.
10. (Amended) A method for predicting the likelihood that an individual will have [an inflammatory bowel] Crohn's disease, comprising the steps of:
 - a) obtaining a DNA sample from an individual to be assessed; and
 - b) determining the nucleotide present at [one or more of] nucleotide position[s] [610, 514,] 218[, 425, 197, 112, 233, 608, 143, 317, and 316] relative to the 5' most nucleic acid in [SEQ ID NO: 1119, SEQ ID NO: 1124,] SEQ ID NO: 1127[, SEQ ID NO: 1133, SEQ ID NO: 1142, SEQ ID NO: 1160, SEQ ID NO: 1262, SEQ ID NO: 1294, SEQ ID NO: 1341, SEQ ID NO: 1832, and SEQ ID NO: 1847, respectively,]

wherein the presence of [one or more of a thymine at nucleotide position 610, a guanine at nucleotide position 514,] a cytosine at nucleotide position 218[, a cytosine at nucleotide position 425, a guanine at nucleotide position 197, a cytosine at nucleotide position 112, a cytosine at nucleotide position 233, a cytosine at nucleotide position 608, an adenine at nucleotide position 143, a thymine at nucleotide position 317, and a thymine at nucleotide position 316] is indicative of a reduced likelihood of [having an inflammatory bowel] Crohn's disease in the individual as compared with an individual having [one or more of a guanine at nucleotide position 610, a cytosine at nucleotide position 514,] a guanine at nucleotide position 218[, a thymine at nucleotide position 425, an adenine at nucleotide position 197, an adenine at nucleotide position 112, a guanine at nucleotide position 233, a

thymine at nucleotide position 608, a guanine at nucleotide position 143, a guanine at nucleotide position 317, and a cytosine at nucleotide position 316, respectively.]

12. (Amended) A method according to Claim [4] 10, wherein the individual is an individual at risk for development of Crohn's disease.